Abstract

The invention provides a filtration apparatus for volume-reduced gel-state polystyrene resin which can remove foreign matter contained in volume-reduced gel-state polystyrene resin by continuously and effectively filtering the volume-reduced gel-state polystyrene resin.

The filtration apparatus includes a filtration unit 11 in the form of a hollow cylinder having an outer peripheral surface formed of a filter portion 12 for filtering volume-reduced gel-state polystyrene resin; a spiral plate 31 provided on the inner surface of the filtration unit 11, projecting toward the inside of the filtration unit 11 and spiraling in the axial direction of the filtration unit 11; and a holding/driving portion 19 for holding both axial ends of the filtration unit 11 and for rotating the filtration unit 11 about the axis thereof; wherein the filtration unit 11 is disposed so that the axial direction thereof is positioned generally horizontal, and the volume-reduced gel-state polystyrene resin is fed from the first end of the filtration unit 11 to the inside thereof while the filtration unit 11 is rotated by means of the holding/driving portion 19, whereby the volume-reduced gel-state polystyrene resin is continuously separated into volume-reduced gel-state polystyrene resin having passed through the filter portion 12 and foreign matter contained in the volume-reduced gel-state polystyrene resin and transferred to the second end of the

filtration unit 11 by means of the spiral plate 31.